

# Comparisons of Job Characteristics

**Focus Occupation:** [Architectural and Civil Drafters \(17-3011\)](#)

**Associated Occupation:** [Civil Engineering Technicians \(17-3022\)](#)

[Compare Knowledge](#)

[Compare Skills](#)

[Compare Abilities](#)

[Compare Detailed Work Activities](#)

[Compare Tools and Technologies](#)

<<	Focus occupation element is much lower
<	Focus occupation element is lower
0	Focus occupation element is at a similar level
>	Focus occupation element is at a higher level
>>	Focus occupation element is at a much higher level

## Knowledge

Similarity of Focus Occupation to Associated Occupation: 87

**Focus Occupation:** Architectural and Civil Drafters (17-3011)

**Associated Occupation:** Civil Engineering Technicians (17-3022)

Associated Occupation's Key Knowledge Elements	Average Rating, All Occupations	Associated Occupation's Rating	Focus Occupation's Rating		Evaluation of Focus Occupation
Engineering and Technology	5.7	15.6	15.2	0	Current knowledge level may be sufficient
Building and Construction	4.0	15.1	15.5	0	Current knowledge level may be sufficient
Mathematics	9.2	15.0	13.3	<	Expanded education and/or training may be required
Design	5.2	14.1	21.0	>>	Current knowledge level is likely more than sufficient
Public Safety and Security	6.9	10.6	7.3	<<	Extensive education and/or training may be required
Geography	3.9	9.0	7.9	<	Expanded education and/or training may be required
Transportation	4.6	8.6	4.2	<<	Extensive education and/or training may be required

The maximum possible rating is 25.

Source: Alaska Department of Labor and Workforce Development, Research and Analysis Section analysis of O\*NET (Occupation Information Network) data.

## Skills

Similarity of Focus Occupation to Associated Occupation: 89

**Focus Occupation:** Architectural and Civil Drafters (17-3011)

**Associated Occupation:** Civil Engineering Technicians (17-3022)

Associated Occupation's Key Skills Elements	Average Rating, All Occupations	Associated Occupation's Rating	Focus Occupation's Rating		Evaluation of Focus Occupation
Reading Comprehension	10.7	12.9	11.3	<	A higher skill level may be required
Mathematics	6.2	8.7	11.0	>	Skill level is likely sufficient
Operations Analysis	5.0	7.9	8.0	0	Current skill level may be sufficient

The maximum possible rating is 25.

Source: Alaska Department of Labor and Workforce Development, Research and Analysis Section analysis of O\*NET (Occupation Information Network) data.

Abilities		Similarity of Focus Occupation to Associated Occupation: 98			
Focus Occupation: Architectural and Civil Drafters (17-3011) Associated Occupation: Civil Engineering Technicians (17-3022)					
Associated Occupation's Key Abilities Elements	Average Rating, All Occupations	Associated Occupation's Rating	Focus Occupation's Rating	Evaluation of Focus Occupation	
Oral Comprehension	12.5	12.8	12.7	0	Current ability level may be sufficient
Near Vision	11.1	12.6	13.3	0	Current ability level may be sufficient
Oral Expression	12.4	12.2	11.5	0	Current ability level may be sufficient
Deductive Reasoning	10.6	11.4	10.6	0	Current ability level may be sufficient
Visualization	7.5	11.4	12.5	0	Current ability level may be sufficient
Written Comprehension	11.0	11.4	12.6	>	Current ability level is likely sufficient
Written Expression	9.8	11.4	11.2	0	Current ability level may be sufficient
Problem Sensitivity	11.1	10.8	11.5	0	Current ability level may be sufficient
Mathematical Reasoning	6.3	10.3	10.1	0	Current ability level may be sufficient
Number Facility	6.3	9.2	8.5	0	Current ability level may be sufficient
Memorization	5.6	6.9	5.8	<	Some improvement in abilities may be required

The maximum possible rating is 25.

Source: Alaska Department of Labor and Workforce Development, Research and Analysis Section analysis of O\*NET (Occupation Information Network) data.

Activities that Both Occupations Have in Common		Similarity of Focus Occupation to Associated Occupation: 89
Focus Occupation: Architectural and Civil Drafters (17-3011) Associated Occupation: Civil Engineering Technicians (17-3022)		
Work Activities	Exclusivity of Activity	
Analyze technical data, designs, or preliminary specifications	47	
Communicate technical information	4	
Determine material or tool requirements	72	
Develop plans for programs or projects	31	
Draw maps or charts	69	
Draw prototypes, plans, or maps to scale	57	
Evaluate engineering data	60	
Examine engineering documents for completeness or accuracy	62	
Inspect project operations, or site to determine specification compliance	72	
Interpret aerial photographs	69	
Interpret maps for architecture, construction, or engineering project	77	
Prepare technical reports or related documentation	22	
Read blueprints	10	

Read technical drawings	7
Understand construction specifications	53
Understand engineering data or reports	48
Understand technical operating, service or repair manuals	6
Use computer aided drafting or design software for design, drafting, modeling, or other engineering tasks	58
Use drafting or mechanical drawing techniques	50
Use land surveying techniques	80

Not all positions in these occupations will necessarily perform all of the listed activities. The exclusivity rating is an indication of how unique the activity is amongst all occupations. The maximum rating is 100. High scores indicate that only a small number of occupations engage in that activity.

Source: Alaska Department of Labor and Workforce Development, Research and Analysis Section analysis of O\*NET (Occupation Information Network) data.

## Tools and Technologies that Both Occupations Have in Common

Similarity of Focus  
Occupation to Associated  
Occupation: 49

**Focus Occupation: Architectural and Civil Drafters (17-3011)**

**Associated Occupation: Civil Engineering Technicians (17-3022)**

Tools and Technologies	Exclusivity
Computer data input devices	2
Computer printers	2
Computers	1
Content authoring and editing software	1
Industry specific software	1
Information exchange software	1

Not all positions in these occupations will necessarily use all of the listed tools and technologies. The exclusivity rating is an indication of how unique the tool or technology is amongst all occupations. The maximum rating is 100. High scores indicate that only a small number of occupations use that tool or technology.

Source: Alaska Department of Labor and Workforce Development, Research and Analysis Section analysis of O\*NET (Occupation Information Network) data.